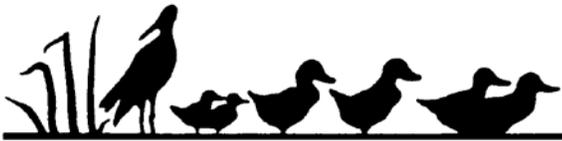


FRIENDS of FAMOSA SLOUGH



A California Non-Profit Corporation



Box 87280, San Diego, CA 92138-7280

SUMMER 2018 NEWSLETTER

A grim look at the future of California's wetlands

by Ally Celones Senturk

Coastal marshes, like the Famosa Slough and the Tijuana River Estuary, provide a number of valuable benefits to our local communities. They act as a buffer for our increasing urban developments, capturing runoff and filtering out pollutants before they reach our oceans. They reduce flooding by absorbing storm surges, and provide essential habitat for many species of plants and animals. Coastal wetlands are especially important for sea and shorebirds who rely on these areas for nesting, resting, and foraging habitat. On top of that, they are one of the most effective habitats in terms of uptaking and storing carbon, surpassing even tropical forests.

Despite the obvious need to protect these areas, less than 10% of California's historic salt marshes remain. The vast majority have been lost to development and dredging, as the population of the Golden State has grown. The Slough nearly fell victim to this rash of development, but instead stands as testament to the power of local activism, and the potential for even disturbed habitat to be restored and to offer quality resources for wildlife. While this deserves much celebration, a broader view of our state's other coastal wetlands does not paint as rosy of a picture.

A recent LA Times article explored the pressures our West coast marshes are facing – rising tides on one side, and increasingly dense urban development on the other. The results were not pretty – taking current projections of sea level rise into account, all of California's and Oregon's coastal wetlands may disappear by 2110, with only a few hanging on in the state of Washington.

In a more natural system, coastal marshes adapt to sea level rise by migrating inland through a process called transgression. We have halted this natural give-and-take process by impeding sediment flows through the building of dams, channelizing of rivers, and paving of roads. Where coastal marshes would naturally creep inland to adjust and ease the impacts of sea level rise, our roads, homes, and railroads present physical barriers for these wetland areas to expand. This "coastal squeeze" also
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Shot Hole Borers at the Slough

by David Kimball

A boring beetle known as the Polyphagous Shot Hole Borer was first seen in California in 2003. The beetle is smaller than a grain of rice and drills into trees leaving fungus that attacks and kills them. Some trees naturally repel the beetle but they have been found in many species including willows, avocados, sycamores, and some maples. The infestation has spread from Los Angeles County both to the north and south, arriving in San Diego about three years ago, and has since become a serious problem throughout the County.

Suspicious that the borer beetles had reached the Slough were confirmed when arroyo willow trees with dying branches were tested and found to contain the beetles. Opinions on how they should be treated vary. Originally, the advice was to cut the whole tree to the ground, grind it into chips, cover with a plastic tarp and leave in place for at least three months (this process is called solarization). But recently agricultural scientists at UC Riverside have observed that many trees will recover if only the affected branches are cleared. At the Slough, we are keeping a sharp eye out for infected trees and will clear only those limbs that have boreholes. Our hopes are that the trees will recover.



The signs for shot hole borer infestations are tiny little pinholes in the tree bark and sawdustlike powder, called frass, around the holes. There may also be large sap stains around these holes. Keep a look out for these signs among your own trees, and if you find a tree that appears to be infected, follow these steps:
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A grim look at the future of California's wetlands (continued from Page 1)

causes beaches to erode quickly as our developed coastline impedes upon the proper flow necessary for sediment buildup and replenishment.

Add to this impaired inland transgression the process of land subsidence (i.e. the gradual settling of the Earth's surface due to subsurface movements within the crust), and the amount of retreating coastal wetlands increases. River delta sediments can undergo subsidence due to increased compaction and dewatering as water and gases are squeezed out of soft sediments - similar to squeezing water out of mozzarella cheese, or squishing a piece of bread. Increased development and weight on coastal land masses can also increase compaction and subsidence. All of this amounts to an overall reduction (and perhaps total loss) of coastal wetlands.

If we do lose our coastal marshes, there will be significant impacts to both humans and wildlife. Wetland-dependent species would likely decrease significantly, and may become extirpated. There would be associated risks to human health and property value as the frequency and intensity of flooding, storm surges and groundwater contamination increased. In the United States, 23 of the nation's 25 most densely populated cities are coastal.

With an anticipated 5.5 foot increase in sea level by 2100, we will need to be innovative in our attempts to save coastal wetlands from being completely squeezed out. Scientists are developing a few options – adding additional sediment within wetlands in order to raise them above high tide lines is one potential solution, but it is expensive and time-consuming. Another option is for land managers and city officials to strategically acquire property along the coast and keep it open for marshes to migrate inland. Protecting and restoring upland area surrounding existing marshes would compliment this tactic. Cue the ReWild Mission Bay project, which aims to do this for Mission Bay's remnant wetlands.

As a wetland that can be separated from ocean tides by flood gates, the Slough may escape the worst effects of sea level rise. The potential to close the tide gates in a way that prevents total inundation is currently being discussed by the Board, and has some interesting implications. In the meantime, putting pressure on our local, state and federal representatives to prioritize wetlands protections and restoration projects is one way to take a stand to protect these beautiful and fragile habitats.

Shot Hole Borers at the Slough

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1. **Report it to the local Agriculture office at sdcawm@sdcounty.ca.gov.**
2. **Look for other infected species in the area.**
3. **Dispose of diseased wood carefully.** If you remove infected branches or trees, it's best to put the wood through a chipper; this should kill most of the beetles. Put a tarp over the chipped wood for at least two months in direct sun; the heat should bake remaining beetles to death.
4. **Do not move potentially infected wood!**
5. **Don't spread the disease.** If you're cutting into multiple trees, sterilize tools to prevent the spread of the fungal disease.

Eagle Scout Project

In November 2016, **Paolo Roque** from **Troop 260** constructed an interpretive sign at the entrance to the Famosa Channel. He created a distinctive sign with pictures of some of the birds seen at the Slough and a map and information on the back about taking care of the Slough. Thanks, Paolo, and congratulations!



Thank You to Our Volunteers and Donors

In the past year, we've had work events with **Correia Middle School AVID** students led by **Stacey Tinsley**, a group from **Pt. Loma Rotary** led by **Leon Scales**, **The House of Yogi** led by **Beth Purcell**, **Thomas Manion Foundation**, **San Diego River Park Foundation**, and **I Love a Clean San Diego**.

Francis Parker School, with the leadership of teacher, **Rose Hanscom**, has been bringing classes to the Slough for several years. This year, in honor of Ms. Hanscom's retirement, Francis Parker had a fundraiser and made a generous donation to the Friends. Also, this year, our longtime member and supporter, **Evelyn Klees**, generously donated in memory of her husband, **Robert Klees**. We are very grateful for all the help and support. Thank you!

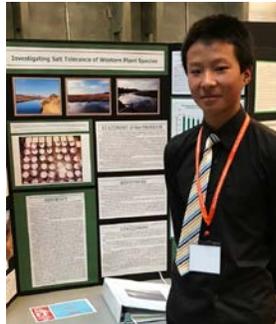
If you belong to a group that would like to help at the Slough, let us know. We would be happy to set up a separate work event for the group.

2018 Science Fair Winners

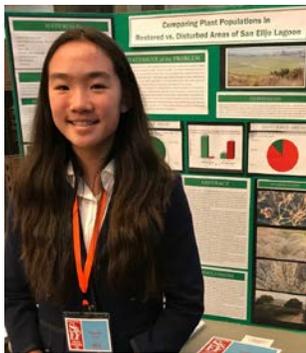
by David Kimball

Once again, students from The Rhodes School swept the Friends of Famosa Slough 2018 Greater San Diego Science and Engineering Fair awards. Awards went to 7th graders Eric Yang and Pascale Fung.

Eric tested native plant seed germination at varying levels of soil salinity and determined the limits beyond which few plants will grow. He noted the applicability of his work to expected sea level rise.



Pascale observed native and non-native plants at San Elijo Lagoon in disturbed and restored areas. She concluded that restoration efforts at the Lagoon have been highly successful in excluding non-native plant species.



Both projects were very relevant to local wetlands like the Slough, which are currently experiencing the effects of invasive plants and will likely experience the effects of sea level rise in the future.

News of the Slough

by Jim Peugh

As usual, the number of species of birds visible in the open water areas of the Slough is very low this summer. However, there is still quite a variety of riparian birds in the treatment ponds at the south end of the Slough.

The City is trying to determine how to avoid the occasional heavy growth of algae that occasionally occurs. A large plastic structure was recently installed near the bus stop on West Point Loma Boulevard. Another has been installed by the north end of the concrete trapezoidal channel that runs from Valeta Street to the treatment ponds. Those structures will take samples of water at specific times to help identify the sources of the problem. Periodically, biologists will sample the water column for the algae level at dozens of locations across the Slough, a very muddy job.

Some areas of the Slough have become dumping sites. The worst violations have been at the Valeta Street parking lot, but the parts of the Slough along West Point Loma Boulevard, at the foot Mentone and Temecula Streets, also experience high levels of litter and dumping. The trash and unwanted items have a negative impact on the water and wildlife. Removing this litter is time-consuming for volunteers and members of the Park Department. If you see someone leaving stuff at the Slough, please try to get a license number and let us know.

There has also been quite a bit of illegal camping occurring around the Slough, which damages the habitat and results in litter. If you observe people leaving trails to get to or establish a campsite, please report it to the Police Department non-emergency number, 1-619-531-2000. You can get to a person by pushing the star (*) button when the recording starts. The police have been very helpful recently in getting campers out of the habitat areas of the Slough.

On July 12, there was a fire on the south bank of the Slough. It was pushed eastward by the wind, and burned about 3/4 acres, mostly native plants. The fire department got to it within a few minutes of being called. It burned up to the Point Loma Tennis Club fence and did not do any damage to the complex, except melting the plastic screen that was hanging on the fence by the tennis court. It could have been started by a cigarette butt tossed into the vegetation along that trail. We find a huge number of cigarette butts in the vegetation, in spite of the No Smoking regulation in the park. If you get the opportunity, please discourage people from smoking in the Slough to avoid future fires and loss of sensitive native vegetation. If you see anyone building a fire in the Slough, please call 911 to get it stopped.

The Friends of Famosa Slough (FFS) is a 501(c)(3) nonprofit organization established to protect and restore Famosa Slough as a natural wetland preserve and to promote public awareness of the importance of wetlands. The City of San Diego purchased the Slough in September 1990. The City's Park and Recreation Department manages it.

The City's contact is the **Mission Bay Senior Park Ranger, phone 858/581-7602.**

FFS Contact Information: Phone **619/224-4591** or Email info@famosaslough.org.

For more information about the Friends, see the FFS web site: <http://www.FamosaSlough.org> and FFS Facebook page, www.facebook.com/FamosaSlough.

MEMBERSHIP IN FRIENDS OF FAMOSA SLOUGH

_____ FULL MEMBERSHIP. Yes! I/We support the goals of FFS and submit \$10.00 annual dues. \$ _____

_____ ASSOCIATE MEMBERSHIP. Yes! I/We support the goals of FFS and wish to be counted.

(Contributions are tax deductible to a 501(c)(3) organization.)

ADDITIONAL CONTRIBUTION: \$ _____

TOTAL AMOUNT ENCLOSED: \$ _____

NAME(S) _____ PHONE _____

ADDRESS _____ E-MAIL _____

CITY _____ STATE _____ ZIP _____

I/We volunteer to: _____ assist with administrative tasks, _____ clean up around Slough, _____ help with educational activities, _____ distribute flyers, _____ assist in park planning, _____ collect environmental data/do research, _____ assist in special events, _____ anything.



PO Box 87280, San Diego, CA 92138-7280

ADDRESS SERVICE REQUESTED

UPCOMING EVENTS

WORK PARTIES

2nd Saturday of odd-numbered months —
September 8, November 10, January 12, etc.

Meet at 9:00 AM at the intersection of West Point Loma and Famosa Boulevards - **Volunteers needed!**

RSVP to info@FamosaSlough.org

NATURE WALKS

3rd Saturday of every month — August 18, September 15, October 20, November 17, December 15, etc.

Meet at 1:00 PM near the kiosk on Famosa Blvd., south of West Point Loma Blvd. - **Beginners welcome!**

Map Location: W. Pt. Loma Blvd. & Famosa Blvd., San Diego, CA 92107



**Juvenile Little Blue Heron (Calico Phase)
By Ray Spencer (July 2012)**